

In claims 1, 7, 12, and 17, line 1, "the eye" lacks antecedent basis.

Claims 1, 7, 12 and 17 have been amended to: "in intimate contact with **an** eye of a contact lens user".

In claims 1, 7, and 17, line 7, "the gripped side" lacks antecedent basis.

In claims 1, 7, and 17, line 7 "leaving the gripped side free" has been deleted.

In claims 2, 13, and 18, line 2, "the user's thumb and finger" lacks antecedent basis.

In claims 2, 13, and 18, line 2 "between the user's thumb and finger" has been deleted.

In claim 12, line 6, "the opposing free side",

Lines 2 and 3 have been amended to define "a free portion of the circular edge". Line 6 has been amended to refer to the "free portion of the circular edge".

And "the instrument", are without proper antecedent basis.

This has been amended to "a contact placement instrument" in lines 1 and 6.

At line 12, "the second free side" lacks antecedent basis.

This has been amended to "free opposing edge" as described in line 2.

Claim Rejections-35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

I am responding with the following law in mind:

Prima Facie Obviousness

- (1) Some suggestion or motivation.....to modify.....combine.
- (2) Reasonable expectation of success.
- (3) Prior art must teach or suggest all the claim limitations MPEP § 2143.03.

MPEP § 2144.05

Prima Facie Obviousness may be rebutted by showing that the art, in any material respect, teaches away from the claimed invention (In re Geisler).

Dependent Claims

If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed.Cir. 1988).

4. Claims 1-21 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Shoup (4,123,098).

Shoup teaches a contact lens placement instrument. The reference also teaches in placing the soft contact lens on a person's eye,

This is true.

the insertion device 10 is also held with one hand around the flexible bulb 12 and the bulb 12 is squeezed slightly to provide suction to grip the back surface portion of the soft contact lens which is usually picked off a person's hand

This is true.

after rinsing with a saline solution.

This is stated in Col. 4 lines 17-19 in Shoup and is significant in that the tool is used **after** rinsing with saline solution.

Shoup proceeds to state: "The cup-shaped element 22 with its soft contact lens located therein **is positioned** so as to permit the soft contact lens to be **placed on the eye's pupil**. Upon contact on the eye, the soft contact lens is released and applied to the eye by squeezing the flexible bulb 12 which causes air pressure to propel the soft contact lens onto the eye".

The present invention rinses the contact lens **after placement** on the lens placement tool which Shoup **impliedly teaches away** from. Shoup states above that the contact lens placement tool is used **after** rinsing the lens and, in the text that follows, places the contact lens directly on the pupil of the eye without any intervening steps, such as rinsing the contact lens while it is on the contact lens placement tool.

The contact lens placement tool disclosed in the present invention and the contact lens tool disclosed in Shoup are distinctly different tools as I will proceed to explain. The Shoup contact lens tool cannot rinse the contact lens after the

lens is placed on the contact lens placement tool; it is physically impossible which is well known by persons of ordinary skill in the art.

The reference discloses the placement instrument as claimed.

Issuing Patent.

The placement instrument as claimed has been issued a notice of allowance and will issue as a patent shortly. It is patentable over Shoup. Note in the present invention in Figs. 1,4,5 and 6 the tip of the contact lens tool is considerably smaller in diameter than the contact lens diameter which is critically necessary for rinsing the contact lens while it is being held by the contact lens tool. As disclosed in Fig. 5 the tip of the contact lens tool is not submerged in the solution when the contact lens is dipped in the solution.

Problem That the Present Contact Lens Tool Solves.

Two methods may be employed to attach a soft contact lens to an object such as a tool or an eye. These are surface tension and/ or vacuum pressure. A good example of surface tension is the retention of a contact lens on a user's eye.

Surface Tension.

The cohesive forces between molecules down into a liquid are shared with all neighboring atoms. Those on the surface have no neighboring atoms above and exhibit stronger attractive forces upon their nearest neighbors on the surface. This enhancement of the intermolecular attractive forces at the surface is called surface tension. Surface tension is well known in the art. Contact lens would not stay on the eye without surface tension. Surface tension also holds the contact lens on the user's finger during placement of the contact on the user's eye. It is well known in the art that swimming with a contact lens on breaks the surface tension and the contact lens floats off the eye. The surface molecules now have neighboring atoms, pool water, and the stronger attractive force between the fluid on the eyeball and the contact lens is dissipated. For the same reason the contact lens will float away if it is attached by surface tension to a finger or a contact lens tool during immersion into a liquid such as a contact lens solution. The contact lens tool in the present invention solves this problem by leaving non-contacting areas of the contact lens which allows immersion of these non-contacting areas without immersing the tool. The contact lens does not float off the tool during rinsing of the contact lens while mounted to the tool.

Vacuum Pressure.

Vacuum pressure will hold a contact lens on a lens placement tool; but the soft contact lens presents special problems when a vacuum force is applied to the lens. The soft contact lens is fragile and porous which is well known in the art. The porosity produces vacuum loss which means a greater vacuum force must be used and the fragility means the vacuum force must be kept minimal. The amount of contacting surface between the contact lens and contact lens tool is a variable. The more contacting surface the less the vacuum pressure must be.

The Shoup Reference.

Shoup does not dip the contact lens in a solution while it is mounted to his contact lens tool; but does produce enough vacuum pressure to remove the contact lens from the user's eye. As shown below, Shoup's contact lens tool fits the entire diameter of the contact lens which leaves no free area of the contact lens to be dipped as discussed above.

Shoup does not directly show a drawing with a contact lens mounted on the Shoup contact lens tool as the contact lens tool disclosed in the present invention; therefore, the following analysis of Shoup is necessary in order to relate the size of the Shoup tool in relation to a contact lens.

Shoup Analysis.

The following reveals the dimension of Shoup's contact lens tool.

Longitudinal Tube.

Although the longitudinal tube 14 does not directly touch the contact lens its size is important to determine because, as Shoup discloses in his drawings, the contact lens tool tip 22 size is relative to the longitudinal tube 14. Shoup does not state a specific measurement for the interior of the longitudinal tube 14, but the following indicates that Shoup's interior size is considerably larger than that of the present invention:

----Figs. 1, 2 and 4 indicate the tube (14) is large in comparison to the cup (22) (the cup size is discussed infra). Fig. 2 indicates the tubular element (20) is thin walled.

----Col. 2, lines 59 and 60 state: "Preferably, the flexible bulb member 12 is a four ounce capacity..." which indicates the need for a high volume of air which would require a large interior diameter of the hollow tube 14.

----Col. 3, lines 43 to 46.state: "for providing maximum gripping or suction action -----which is critical during insertion and retraction operations." (The tool used in the present invention requires no suction ability.)

----Col. 4, lines 42 to 45 state: "concave blocking means extending across said semi-circular shaped cavity for preventing a soft contact lens from being sucked down in the direction of flexible bulb member." This statement indicates the interior diameter of the tube is substantial when it has the ability to suck the soft contact lens into it. (The present invention has a 1 mm interior diameter tube making sucking the lens into it or damaging the lens impossible.)

The substantial interior tube diameter is further demonstrated in the following:

----Col. 4, lines 46 to 49 state: "said concave blocking means comprising a diagonally extending concave blocking member having a relatively large opening on each side thereof for permitting maximum flow of air pressure". Figs. 2 and 3 also disclose the largeness of these openings.

----Cols.3 and 4, lines 62 to 12 describe the removal of the soft contact lens from a person's eye which further indicates the large interior volume of the tube required to produce this amount of suction. (The present invention is incapable of producing the volume of suction to remove the lens from the eye, in fact the present invention was designed purposefully to not be capable of this with safety in mind.)

The contact lens tool in the present invention is not capable of removing the contact from the eye due to the small cup size and small interior tube diameter.

The Cup.

The size of the cup 22 is not directly stated in Shoup; but Col. 3, lines 41-50 state: "---the semicircular-shaped cavity 32 (of the cup 22) provides a simple, but very effective technique for providing maximum gripping or suction action around the blocking member 30 on the back surface portion of a soft contact lens which is critical during insertion and retraction operations. The shape of the semicircular-shaped cavity 32 generally conforms to the shape of the semicircular-shaped soft contact lens." The conclusion is that the maximum gripping or suction and conforming to the shape of a contact lens requires the cup 22 to be at least the diameter of the largest contact lens or more which would be a diameter of at least 14 mm. There is a good argument that the cup 22 diameter is larger than the largest contact lens in Col. 4, lines 7-12: "Preferably, in the process of actually removing the contact lens from contact with the eye, it may be desirable to tilt sideways and /or twist the insertion and the retraction device 10 to lift off a portion of the contact lens and thereby eliminate stress or pressure on the eye." This clearly indicates the cup 22 extends beyond the 14 mm diameter contact lens and contacts the eye directly thereby demonstrating the cup 22 diameter exceeds 14 mm. (The present invention has a cup of only 4-6 mm in diameter to allow for vision around the cup and to prevent any suction ability for safety reasons as described above. The suction ability requires maximum suction and a cup which fits the entire contact in order to prevent suction damage to the lens.)

The contact tool disclosed in the present invention is not disclosed in Shoup.

The reference also teaches releasing the contact lens with a puff of air as claimed. See figs. 1-4, col. 2, line 38-col. 4, line 26, and the claims.

This is true.

The reference does not teach the dipping steps as claimed.

This is true as discussed above. Additionally the reference does not imply this limitation. The reference teaches away from this limitation as discussed above.

It would have been obvious for one skilled in the art to use the step of dipping the contact lens in the cleaning solution before placing said contact lens in the eye because it is well known in the art. See col. 4, lines 17-19.

As discussed above lines 13-19 states the lens is rinsed prior to picking the lens from the hand with the tool.

It would have been obvious for one skilled in the art to use the step of dipping the contact lens in cleaning solution repeatedly to enhance the cleaning and because it is well known in the art.

To dip the lens while it is on a tool is not well known in the art due to the reasons stated above.



The contact lens as claimed is well known in the art.

The contact lens? It was not claimed. The contact lens tool in the present invention is not well known in the art because it is currently issuing as a patent.

In conclusion, for the following reasons, the present invention is not obvious over prior art.

Prima Facie Obviousness

- (4) Some suggestion or motivation.....to modify.....combine.

There is no suggestion in Shoup to modify his contact placement tool in a manner which allowed rinsing of the contact lens after placement of the lens on the tool. There is no motivation in Shoup to modify his tool. Shoup would first have to recognize debris left on the lens following handling with "apparently clean" fingers is a problem. Shoup did not recognize the problem.

- (5) Reasonable expectation of success.

Shoup's contact lens tool was designed to remove a contact lens. As discussed above Shoup's contact lens tool has no reasonable expectation of being able to rinse a contact lens in the manner the tool disclosed in the present invention rinses a contact lens.

- (6) Prior art must teach or suggest all the claim limitations MPEP § 2143.03.

Shoup does teach or suggest the claim limitations of dipping a contact lens in contact lens solution while the lens is mounted on the contact lens tool.

There is currently in the art no motivation to rinse contact lens following contact with the fingers. Instructions in the use of contact lens go to great lengths to explain the importance of completely clean hands when handling contact lenses. It is well known in the art debris is left on the contact lens from "perfectly clean" fingers. This debris has either/or never considered to be a problem or no method has been developed to remove the debris.

Respectfully submitted,

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